s/055/61/200/003/003/004 D235/D302

A more exact solution .

The author selects equations for the solution at the first, second, third and fourth approximations and points out that such a system of functions is selected to satisfy more accurately the conditions of the work of the shell under the uniformly distributed load. If all the approximating functions are taken into consideration, it would be necessary to pick also the members of the form  $\sin \frac{m\pi x}{a} \sin \frac{n\pi y}{b}$  (m  $\neq n$ ), but in this problem only a symmetrical bending of the panel is considered, thus the latter members cannot have an appreciable influence. Approximating functions satisfy all boundary conditions, and on the "average"

Then writing down the equations of the Bubnov-Galerkin integral (8) $\sqrt{\Phi}\delta\Phi\Phi$   $\Phi = 0.1$ 

Card 3/7

\$/055/61/000/003/003/004 D235/D302

s system is obtained of the algebraic non-linear equations. A numerical example is given then where it is proposed to solve at the fourth approximation the problem  $q_4 = \frac{49.240\pi^6}{192(1-\mu^2)} \left(\gamma + \frac{1}{\gamma}\right)^2 x_7 + \frac{49\pi^6}{4} \left[\frac{49(z_1 + a_2)}{4}\right]$ 

$$-\frac{392}{3}\beta_5 x_5 - \frac{19208}{187}\beta_5 x_7 + \frac{9800}{429}\beta_5 x_1 - \frac{392}{3}\beta_5 x_3 -$$

$$\begin{array}{c} \beta_7 + \frac{8}{45} \beta_1 x_1 + \frac{392}{165} \beta_1 x_3 + \frac{9800}{429} \beta_1 x_5 - \frac{19208}{195} \beta_1 x_7 + \sqrt{\frac{392}{165}} \beta_3 x_1 - \frac{618}{13} \beta_5 x_3 - \frac{5000}{51} \beta_5 x_5 - \frac{19208}{171} \beta_5 x_7 - \frac{19208}{195} \beta_7 x_1 - \frac{19208}{187} \beta_7 x_3 - \frac{19208}{171} \beta_7 x_5 - \frac{392}{3} \beta_7 x_7 \right]. \end{array}$$

The coefficients for the squares could be obtained from the general expression

Where i - refers to  $G(G_{11})$ , and n - to  $x^2(x_{nn}^2)$ . For the products  $\mathbf{x}_{n}$   $\mathbf{x}_{m}$  they do not depend on the order of i and n. The quantities

Card 4/7

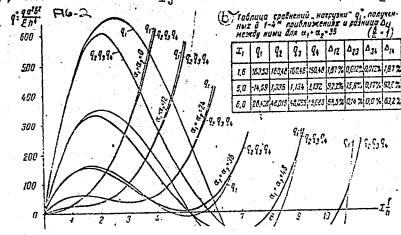
 $\frac{2721}{\text{S}/055/61/000/003/003/004}$  S/055/61/000/003/003/004 D235/D302  $\text{are non-dimensional. The parameter of the stresses } \beta_i = \frac{k_{ji}}{\text{Eh}^2}, \text{ the ratio of the sides } \gamma = \frac{b}{a}, \text{ the parameter of the bending } x_i = \frac{h}{h}, \text{ the parameter of the principal curvatures } \alpha_1 = \frac{k_1 a^2}{h}, \alpha_2 = \frac{k_2 b^2}{h}, \text{ the parameter of the uniformly distributed transversal load } \alpha_i = \frac{\text{oa}^2 b^2}{\text{Eh}^4}.$  The graphic presentations for the solution of the equations of the type (9) for all four approximations is shown in Fig. 2. The difference oetween the first and the second approximation is consideratione oetween the first and the second approximation is considerative, but this difference becomes small between the third and the ble, but this difference becomes small between the Hubbon-Gright provinction. From this it follows that the Bubonov-Gright approximation. From this it follows that for most practive method leads to a convergent solution so that for most practical cases it is possible to accept the second approximation.

s/055/61/000/003/003/004 D235/D302

A more exact solution :..

Fig. 2. The dependence of the parameters of the load from the bending of the panels of the shells.

Legend: a) Values  $x_3$ ,  $x_5$  and  $x_7$  for the shell with  $\alpha_1 + \alpha_2 = 36$ ; b) Table of comparison of the load  $q_1$ , obtained in the approximations 1 - 4, the difference  $\Delta_{ij}$  between them for  $\alpha_1 + \alpha_2 = 36$ .



Card 6/7

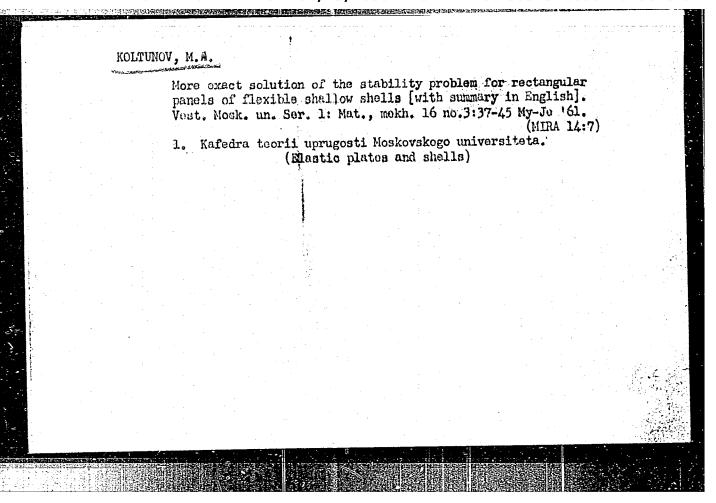
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39639 s/191/62/000/008/010/013 B124/B160

TITLE:

Card 1/3

L'vov, B. S., Koltunov, M. A., Kuznetsov, V. N., Shpakovskaya, Ye. I.

AUTHORS:

Physicomechanical characteristics of glass-reinforced

plastics based on polyester resin. Elasticity constants of

glass-reinforced plastics

Plastiqueskiye massy, no. 8, 1962, 38-40 PERIODICAL:

TEXT: Experimental results in determining the elasticity constants and the effect of loading and deformation rates on the stress-strain diagram of glass-reinforced plastics based on TH-1 (PN-1) polyester resin and T-1 (T-1) glass fabric have been obtained in the laboratoriya stekloplastikov NIIPM (Laboratory of Glass-reinforced Plastics of NIIPM) and the problemnaya laboratoriya fiziko-mekhanicheskikh svoystv polimerov Moskovskogo universiteta (Special Research Laboratory for the Physicomechanical Properties of Polymers, Moscow State University). Isopropyl benzene hydroperoxide and cobalt naphthenate were used as hardeners at room temperature. Test specimens were cut out from the

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Physicomechanical characteristics ...

S/191/62/000/008/010/013 B124/B180

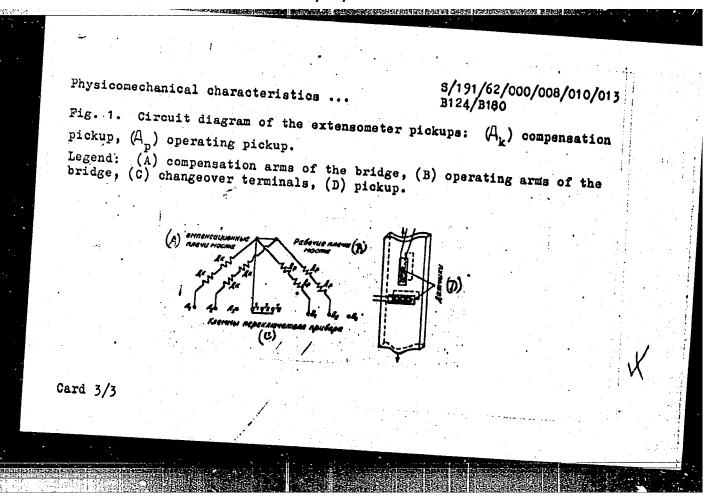
fabric with their axes at angles  $\varphi$  to the warp of 0, 15, 30, 45, 60, 75, and 90°. They were kept at 80°C for 12 hrs. Loading and unloading were done in steps of 100 kg each, and measured with an accuracy of  $\pm$  1%. Fig. 1 shows the circuit diagram of the extensometer pickups which measured with 5% accuracy. Their readings were recorded on a static tensometer sensitivity 1.10-5. Total error of the system did not exceed 3%. The stress-strain diagram is linear up to a deformation of  $\sim$  3.10-3. Worst results are with  $\varphi = 45^\circ$ . The fabric has three symmetry axes. The glass-reinforced plastic investigated is orthotropic.

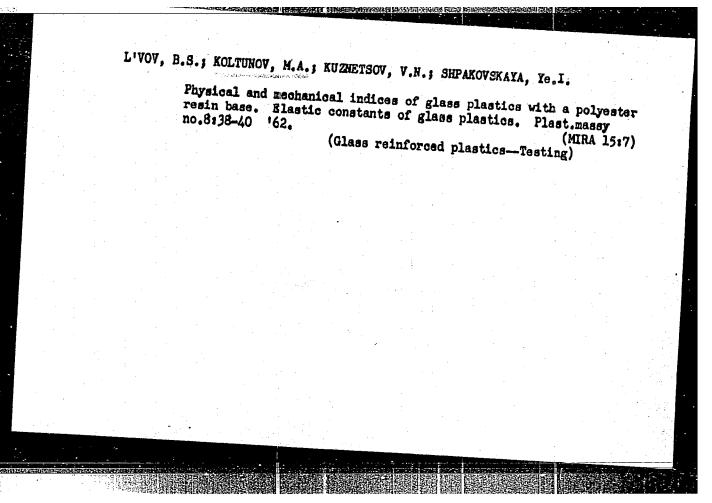
Ey/E<sub>0</sub> =  $\frac{\lambda \cdot \cos^4 \varphi + B \sin^2 \varphi \cdot \cos^2 \varphi + \sin^4 \varphi}{\lambda \cdot \cos^4 \varphi + B \sin^2 \varphi \cdot \cos^2 \varphi + \sin^4 \varphi}$ , where  $\varphi$  is the angle between the

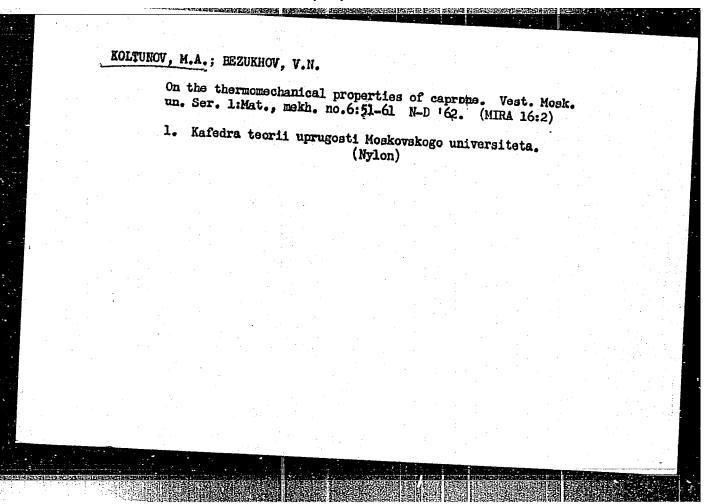
warp and the direction of tensile stress and E = the elasticity modulus in the same direction.  $\lambda = \frac{E_{90}}{E_{0}}$  and  $2B = 4 \frac{E_{90}}{E_{45}} (1 + \lambda)$ . The elasticity

modulus values calculated from these equations are in satisfactory agreement with experimental data. There are 5 figures.

Card 2/3







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KOLTUNOV, M.A.

State of stress in flexible shallow shells. Vest. Mosk. un. Ser. 1: Mat., mekh. 17 no.4:63-68 Jl-Ag '62. (MIRA 15:7)

l. Kafedra teorii uprugosti Moskovskogo universiteta.
(Strains and stresses)
(Elastic plates and shells)

S/191/63/000/002/010/019 B101/B186

AUTHORS:

Koltunov, M. A., Bezukhov, V. N.

TITLE:

Creeping and relaxation of polyamide resin 68 in one-

dimensional stretching

PERIODICAL:

Plasticheskiye massy, no. 2, 1963, 31-36

TEXT: The problemnaya laboratoriya fiziko-mekhanicheskikh svoystv polimerov mekhaniko-matematicheskogo fakul'teta Moskovskogo gosudarstvennogo universiteta im. N. V. Lomonosova (Special Research Laboratory for Physicomechanical Properties of Polymers of the Division of Mechanics and Mathematics of the Moscow State University imeni M. V. Lomonosov) tested the mechanical properties of polyamide resin 68 for machine parts subject to stress and high temperatures. The σ-versus-ε curves for one-dimensional stretching were plotted between 20 and 110°C. σ is directly proportional to ε up to a relative elongation of 8%. This linear curve section ending with σ is followed by an intense flowing at a 10% higher value, σ<sub>fl</sub>, and rupture occurs at σ<sub>t</sub>, the time-dependent Card 1/3

Creeping and relaxation of ...  $\frac{S/191/63/000/002/010/019}{B101/B186}$  resistance. Hysteresis was observed under alternating stress. Irreversible of the following occurred above of. The following equations hold:  $f = (5.16 - 0.033t/t_0)\sigma_m, \text{ where } \sigma_m = 100 \text{ kg/om}^2, t_0 = 1^0\text{C};$   $E = (30 - 0.665t/t_0 + 0.0038t^2/t_0^2)E_0, \text{ where E is the elastic modulus,}$   $E_0 = 10^3 \text{ kg/cm}^2. \text{ The after-effect is expressed by:}$   $E_T = \begin{bmatrix} -1.3(\sigma/\sigma_t)^2 + 0.245(\sigma/\sigma_t) + 0.1 \end{bmatrix} (\sigma/\sigma_t)\psi(t) \ln(\tau/\tau_0 + 1), \text{ where } E_T$  is the residual plastic deformation,  $\tau = t\text{Ime}$ ,  $\tau_0 = 60 \text{ sec}, \ \sigma_t = 470 \text{ kg/cm}^2, \text{ and } \psi(t) = \begin{cases} \text{const} = 1 \text{ at } t \leq t_0 \\ (t/t_0)^n \text{ at } t > t_0; n \approx 4. \end{cases}$  on the basis of the aging theory, and the following is obtained:  $\int_0^{\sigma/\sigma_t} dz/z^2(\alpha z^2 + \beta z + \gamma) = (E/\sigma_0)\psi(t)\ln[(\tau + \tau_0)/\tau_0]. \text{ For resin } 68, \text{ the.}$  Card 2/3.

KOLTUNOV, M.A.; BEZUKHOV, V.N.

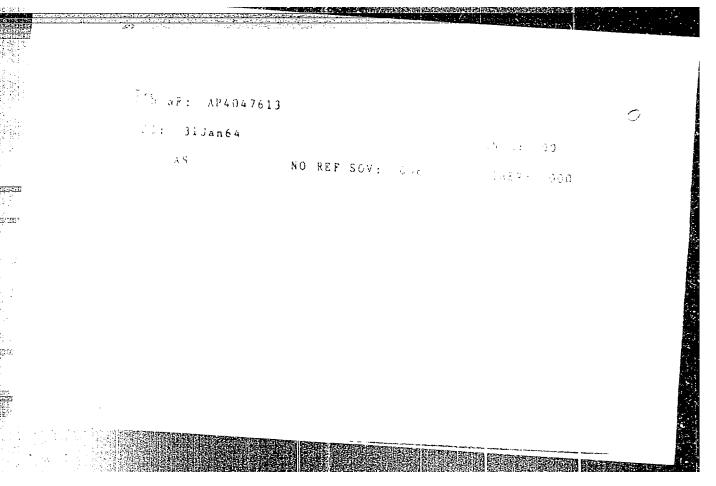
Analysis of creep of orthotropic glass plastics. Vest. Mosk. un. Ser. 1: Mat., mekh 18 no.6:64-70 N-D'63. (MIRA 17:2)

1. Kafedra teorii uprugosti Moskovskogo universiteta.

THE FUT (d)/ENT(m)/ENP(w)/EPF(d)/EFF,/EFF (d) (EFF) V FUT ( ) TO FIX /T/FMA(h) · Pr-4/Pa-4/Deb WW/EIVRM \$3,4155 6. 000 35.0079/0088 1 8 NF: AP4047613 Kaltunev, M. A. the second of the second secon on the design of Elexible, shallow orthotropic shells with inear proof strains Noscow, Universitet. Vestnik, Netini ... Matematika, 1818: shallow shell, orthographic shell. Thexible shell, A offereed plastic, glass relef to the control of the same rior strain effect Soulinear equations of continuity as equilibrium are with consideration of the rate of Arran or of deformation) -vible, shallow shells made of grass-relatorized plastics 16 rasess orthogonal anisotropy of nerinsical properties) is linear stress-strain relationship in the Goltzmann-Volterra a Eirchhoff hypothesis on preservation of normals and the in of orthotropy during the whole are a st determition are

the stresses normal to the middle serface of the shell are of. The discussion is illustrated by an approximate solutiations derived for a particular case when the analytical in for experimental relaxation curves 14 diven. Each dead stress function is considered as a reduct of a known function (depending only on coordinates) and a creep function depending on time) which is determined, the results obtained in agreement with experimental data. If the time dependent serived continuity and equilibrium equations are neglected, if regular nonlineat equations for not involve anella will see the linear (elastic) problets on the hierary of shells interation of the linear prior straips and also be solved without any considerable difficulties. Orig. art.

See Kafedra teorii uprugsti (Department of the Theory of



KOLTUN, M.M.; LANDSMAN, A.P.

Clarification and temperature stabilization of silicon photodells for operation under radiation heat transfer conditions. Kosm. issl. 2 no.4:628-632 Jl-Ag '64. (MIRA 17:9)

ADAMOVICH, Aleksey Nikolayevich; KOLTUNOV, Dmitriy Vasil'yevich; KRUKOVSKIY, M.Ya., nauchi. fed.; VATTS, V.M., red.

[Cementing foundations of hydraulic structures] TSementatsiia osnovanii gidrosooruzhenii. Izd.2., dop. Moskva, Izd-vo "Energiia," 1964. 513 p. (MIRA 18:1)

KOLTUNOV, G., polkovnik

On the Korsun' field. Tekh. i vooruzh. no.2:8-11 F '64.
(MIRA 17:9)

KOLTUNOV, M.A.; BEZUKHOV, V.N.

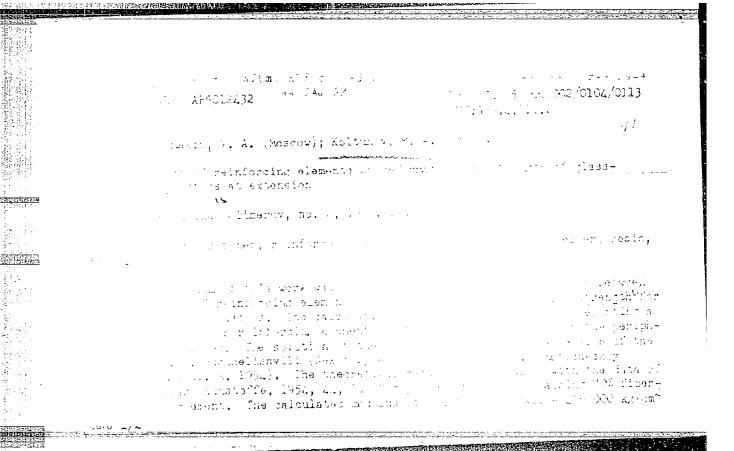
Modeling of Tass reinforced plastics as high-strength structural material. Plast. massy nc.32:34-39 164.

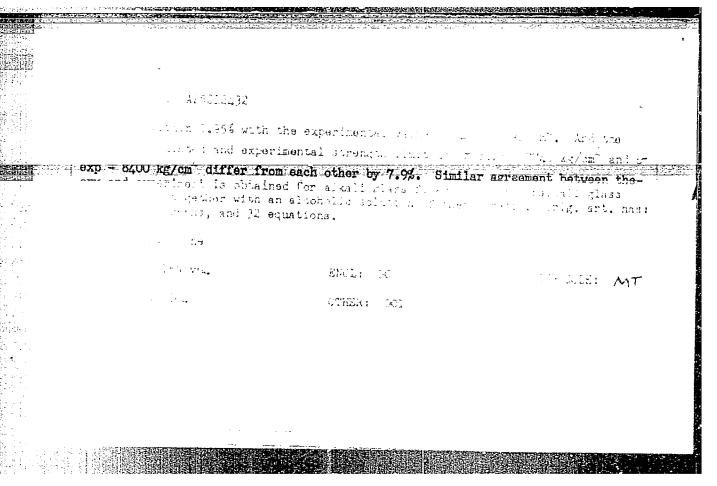
(MIRA 1.5:3)

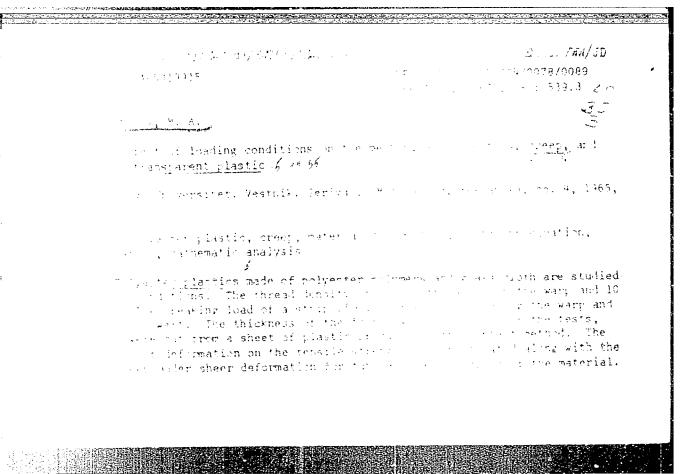
KOLTUNOV, M.A.

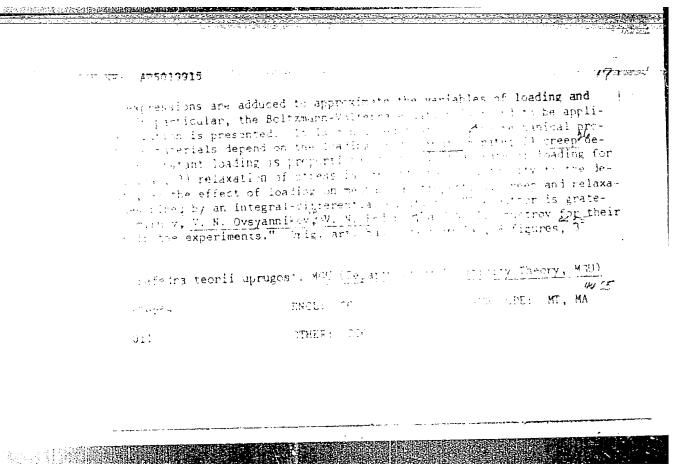
Design of flexible shallow orthotropic shells with linear heredity. Vest. Mosk. un. Ser. 1: Mat., mekh. 19 no.5:79-88 S-0 '64. (MIRA 17:12)

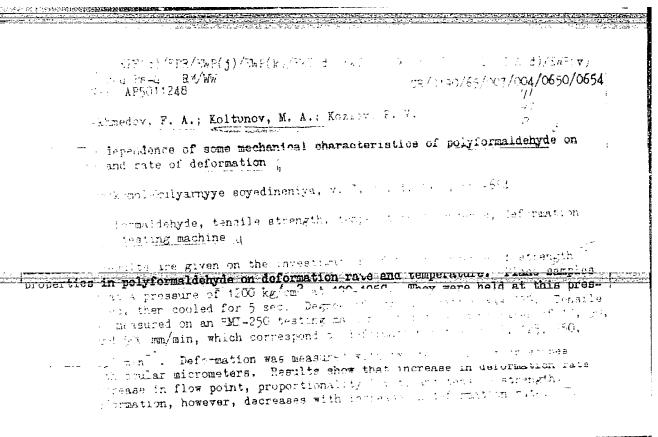
1. Kafedra teorii uprugosti Moskovskogo universiteta.











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AKHHEDOV, F.A., KOLTUNOV, M.A.

Mechanical properties of polyformaldehyde. Plast. massy no.10:28-30 '65. (MIRA 18:10)

KOLTUNOV, M.A.

Effect of loading conditions on the mechanical characteristics, creep, and relaxation of glass-reinforced plastics. Vest. Mosk. un. Ser. 1: Mat., mekh. 20 no.4:78-89 Jl-Ag 165.

1. Kafedra teorii uprugosti Moskovskogo gosudarstvennogo universiteta imeni  $M_{\bullet}V_{\bullet}$  Lomonosova.

AKIMEDOV, F.A.; KOLTUNOV, M.A.; KOZLOV, P.V.

Creep of crystalline polymers. Vest. Mosk. un. Ser. 2: Khim. 20 no. 5:89-92 S-0 \*65 (MIRA 18:12)

1. Kafedra vysokomolekulyarnykh soyedineniy Moskovskogo gosydarstvennogo universiteta. Submitted Dec. 22, 1964.

L 21999-66 ENT(m)/ENP(j)/T IJP(c) WN/RM UR/0191/65/000/010/0028/0030 ACCESSION NR: AP5024503 678.644'141.01:539.3 AUTHOR: Akhmedov, F. A.; Koltunov, M. A. TITLE: Mechanical properties of polyformal dehyde SOURCE: Plasticheskiye massy, no. 10, 1965, 28-30 TOPIC TAGS: polyformaldehyde plastic, mechanical stress, solid mechanical property, elongation, creep, tensile stress, mathematic analysis ABSTRACT: The mechanical properties of polyformaldehyde were studied and equations describing them were developed. Polyformaldehyde samples prepared at the VNIIPTKhimmash were cast at 1200 kg/sq cm at 190-195 C, held for 5 sec, and cooled for 5 sec. Mechanical properties, creep, and relaxation were studied. The mechanical characteristics (elongation, modulus of elasticity and yield point) of polyformaldehyde are dependent on the rate of deformation. This relationship was found previously to be characteristic for other polymeric materi als. Under uniaxial stress and normal temperature under stresses below half Card 1/2

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ACCESSION NR: AP5024503

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the tensile strength, polyformaldehyde has the properties of a linear viscoelastic medium which can be described by the linear Boltzmann-Volterra equation. At stresses greater than half the ultimate strength, the nonlinear equation of Yu. N. Rabotinov applies. "The authors thank V. I. Shobolov for participation in the experimental work." Orig. art. has: 7 figures and 20 equation.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: 11

NR REF SOV: 006

OTHER: 001

Card 2/2 15K

ACC NR: AP6022189 SOURCE CODE: UR/0055/66/000/002/0112/0119 AUTHOR: Koltunov, M. A.; El'-Kurmani, A. ORG: Department of Elasticity Theory (Kafedra teorii uprugosti) TIPLE: Stability of a closed, flexible, orthotropic, cylindrical shell when linear heredity is SOURCE: Moscow. Universitet. Vestnik. Seriya 1. Matematika, mekhanika, no. 2, 1966, TOPIC TAGS: orthotropic shell, shell structure stability, cylindric shell structure, fiberglass, ABSTRACT: Presented are detailed calculations of the stability of a closed, circular, axially stressed cylindrical shell of orthotropic liberglass with a reinforcing linen crossweave. The constructed elastic solutions to the problem indicate that inclusion of linear heredity factors lowers the critical load values for fiberglass shells. Critical loads of shells from materials with linear heredity depend essentially on loading programs and increase as the rate of loading increases. Orig. art. has: 17 formulas and 2 figures. SUB CODE: SUBM DATE: 28Feb65/ ORIG REF: 006 UDC: 539.3

KOLTUNOV, M. V.; GRACHEVA, L.I.; FILIPPOVA-NUTRIKHINA, A.L.;

RESHETNIKOVA, A.D.; FADEYEVA, M.A. and yesikov, m.s.

"The Results of Testing Eursery-age Calidren and their Mothers
for Toxoplasmosis"

Voprosy toksoplazmoza, report theses of a conference on textolaszosis, Moscow, 3-5 April 1961, publ. by Inst Epidemiology and Microbiology im. N. F. Gamaleya, Acad. Med. Sci USSR, Moscow, 1961, 69pp.

USSR/Camma Rays - Penetration Jun 1947
K-ray inspection

"Radioscopy of Industrial Products by Camma Rays,"
P. S. Koltunov, 6 pp

"Vestnik Inzhenerov i Tekhnikov" No 6

Largely mathematical discussion illustrated with photographs, diagrams, and formulae.

10768

KOLTUNOV, P. S.

PA 37/49T81

USSR/Engineering

Welding - Methods

Welding - Preparation

"Inductive Ohmic Heating in Welding Construction Steel," P. S. Koltunov, Engr, 2 pp

"Vest Mashinostroy" Vol XXVIII, No 9

High-carbon and alloy structural steels cannot be welded at low temperatures. Describes induction heating apparatus used for preheating pipes during construction of TETs at Frunze. Includes four sketches.

37/49T81

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KOLTUNOV, P. S.

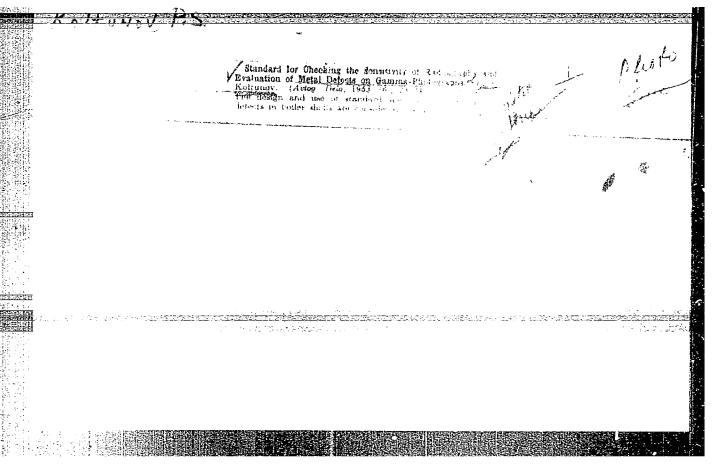
Cand Tech Sci

Dissertation: "V1brational Strength of Welded Joints of Steel. SKnL-2."

31/10/50

Central Sci Res Inst of Industrial Constructions-TsNIIPS.

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ROLIUNOV, 1.5.

ANTOHOV, I.A., kand.tekhn.nauk; ANTOSHIN, Ye.V., inzh.; ASINOVSKAYA, G.A., inzh.; VASIL'YEV, K.V., kand.tekhn.nauk; GUZOV, S.G., inzh.; DEYKUN. V.K., inzh.; ZAYTSEVA, V.P., inzh.; KAZHEKOV, P.P., inzh.; KARAN, Iu.B.; inzh.; KOLTUNOV, P.S., kand.tekhn.nauk; KOROVIN, A.I., inzh.; KRZHECHKOVSKIY, A.K., inzh.; KUZNETSOVA, Ye.I., inzh.; HATVEYEV,N.H., tekhnik; MOROZOV, M.Ye., inzh.; NEKRASOV, Yu.I., inzh.; NECHAYEV, V.D., kand.tekhn.nauk; HINBURG, A.K., kand.tekhn.nauk; SPEKTOR,O.Sh., inzh.; STRIZHEVSKIY, I.I., kand.khiw.nauk; TESMENITSKIY, D.I., inzh.; KHROMOVA, TS.S., inzh.; TSEUNEL', A.K., Inzh.; SHASHKOV, A.N., kand. tekhn.nauk, dots.; SHELECHNIK, M.M., inzh.; SHUKHMAN, D.Ya., inzh.; EDEL'SOH, A.M., inzh.; VOLODIN, V.A., red.; UVAROVA, A.F., tekhn.red.

[Machines and apparatuses designed by the All-Union Institute of Autogenous Working of Metals] Mashiny i apparty konstruktsii VNIIAvtogen. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroitel'noi lit-ry, 1957. 173 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut avtogennoi obrabotki metallov. no.9)

(Gas welding and cutting -- Equipment and supplies)

KOLTUNOV, P.S., kand. tekhn. nauk; NEKRASOV, Yu.I., inzh.

Comparative testing of torches for propane-butane welding. Svar. proizv. no.11:27-29 N'63. (MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy obrabotki metallov.

ARTYUKHOVSKAYA, S.A.; TESMENITSKIY, D.I.; ASINOVSKAYA, G.A.; BOYKO, M.I.; KOLTUHOY, P.S.; NEKRASOV, Yu.L.; KOROVIN, A.I.; NECHAYEV, V.D.; NINBURG, A.K.; SHASHKOV, A.N.; EDEL'SON, A.M.; ANTONOV, I.A., kand. tekhn. nauk, red.

[Using acetylene substitute gases for flame metalworking.] Primenenie gazov-zamenitelei atsetilena pri gazoplamennoi obrabotke metallov. Moskva, Mashinostroenie, 1964. 150p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut avtogennoi obrabotke metallov. Spravochnye materialy po gazoplamennoi obrabotke metallov, no.23). (MIRA 17:9)

KOLTUNOV, P.S., kand.tekhn.nauk; NEKRASOV, Yu.I., inzh.

Welding brass using liquid fuels. Svar.proizv. no.2:30-31 F \*64.

1. Vsesoyuznyy nauchno-issledovatel\*skiy institut avtogennoy

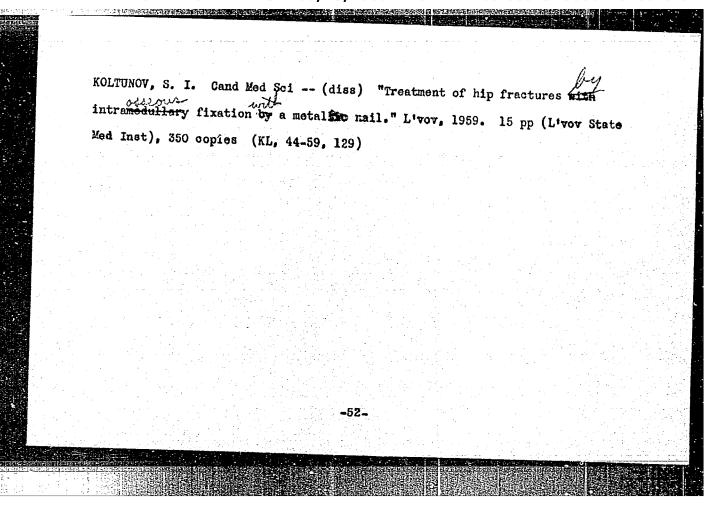
obrabotki metallov.

Treatment of hip fractures by medullary nailing. Nov.khir.arkh.

no.6:41-44 N-D'58.

1. Kafedra fakul'tetakoy khirurgii pediatricheskogo i sanitarnogigtyenicheskogo fakul'tetov (zav. - prof.V.I. Akimov) L'vovskogo
meditsinskogo instituta i 5-ya gorodskaya klinicheskaya bol'nitsa.

(HIP JOINT--FRACTURES)



KOLTUNOY, S.I. (L'vov, ul. Pavlika Morozova, d.5, kv.1)

Observation of a tumor of arterio-venous anastomosis (glomus tumor).

Nov.khir.arkh. uo.6:117 N-D '59. (MIRA 13:4)

1. Kafedra fakul'tetskoy khirurgii (saveduyushchiy - prof. V.I.
Akimov) pediatricheskogo i sanitarno-gigiyenicheskogo fakul'tetov
L'vovskogo meditsinskogo instituta i khirurgicheskoye otdeleniye
5-y klinicheskoy bol'nitsy.

(BLOOD VESSELS--TUKOES)

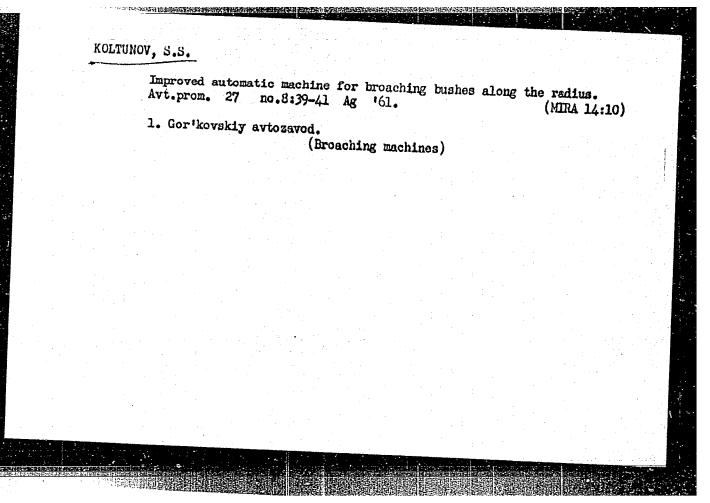
# KOLTUNOV, S.I.

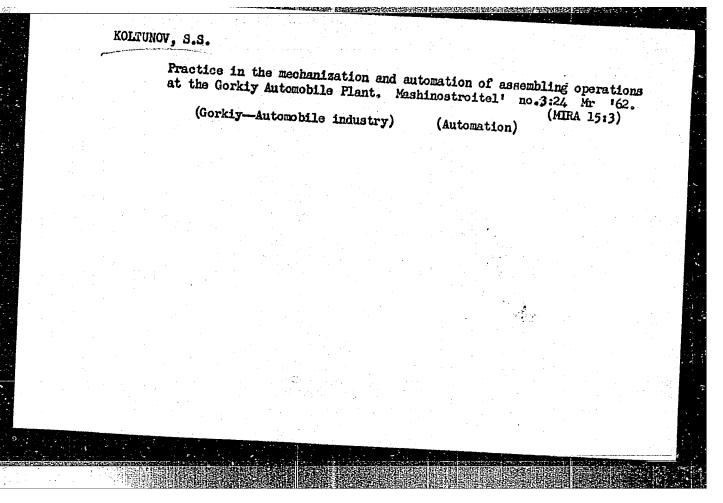
Effect of a metal pin in the intraosseous fixation of the hip on the surrounding tissues, structure and rate of osseous callus formation. Eksp. khir. i anest. 7 no.6:68-70 N-D 162.

(MIRA 17:10)
nitarno-gigiyenicheskogo fakul'tetov (zav. - prof. M.F. Kamayev)
nitsy (glavnyy vrach I.I. Khoma) L'vova.

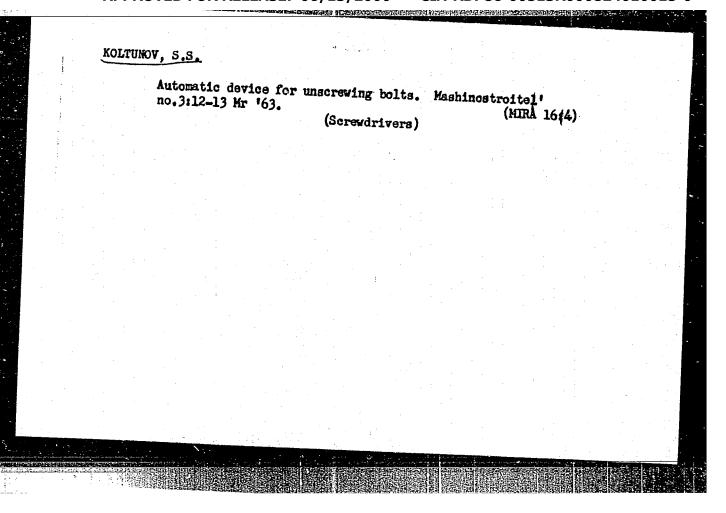
- 1. KOLTUNOV, S. S.
- 2. USSR (600)
- 4. Pneumatic Tools
- 7. Throttles for pneumatic equipment, Stan. i instr. 23 No. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953, Unclassified.



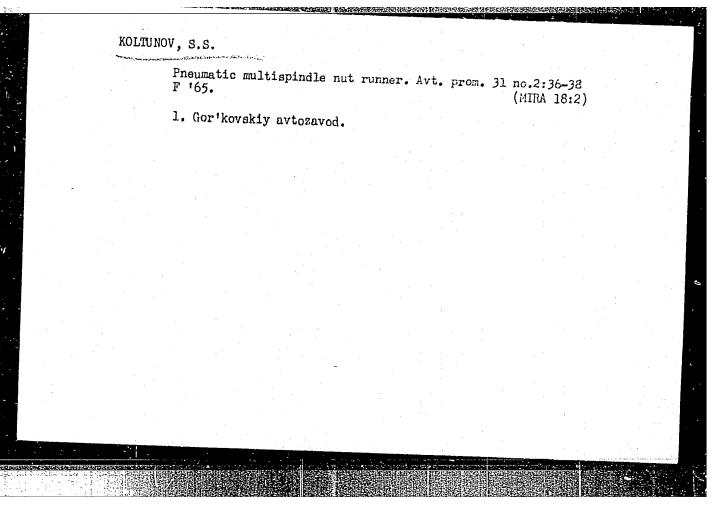


		ov, s.s.						
		Pneumatic	multispindle s	crewdrivers.	Avt.prom.	28 n	0.11:36-38 (MIRA 16:1)	
		1. Goriko	ovskiy avtozavod				20,2,	
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Automation of Manville thread-rolling machines. Avt. prom. 29 no.4:43 Ap '63. (MIRA 16:6)

1. Gor'kovskiy avtosavod. (Machine tools) (Automation)



KOLTUNOV, S. YA.

# USSR/Engineering - Welding, Methods

Mar 52

"Building Up Bearings by Welding With Hydrogen Flame," G.V. Likhvitskiy, S. Ya. Koltunov, G. Ye. Kornblit, Engineers

"Avtogen Delo" $^{\lambda 3}_{\Lambda}$ No 3, pp 25, 26

Describes technology of method indicating essential advantages: possiblity for restoring dimensions of bearing without melting out old metal; high adhesiveness between babbitt and base metal considerably better than in case of hot pouring; building up babbitt with thin layers from 0.3 mm; practical absence of metal loss (0.3-0.5%); possibility for building up large details without removal.

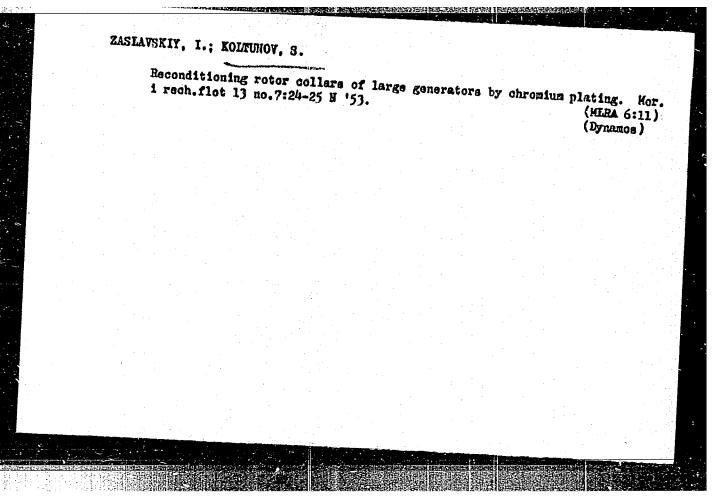
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CIA-RDP86-00513R000824010015-0

- 1. TSYMANYY, A.: LIKHNITSKTY, G.: KOLTUNOV, S.
- 2. USSR (600)
- 4. Babbitt Metal
- 7. Method of melting and pouring babbitt by means of hydrogen flame. Mor. flot. 12. no. 12. 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.



APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000824010015-0"

- 1. KOLTUNOV S.YA. Eng., LIKHNITSKIY G.V. Eng.
- 2. USSR (600)
- 4. Solder and Soldering
- 7. Introduction of smelting and soldering with hydrogen flame in construction work, Avtog. delo 24 no.2, 1953.

9. Mathly List of Russian Accessions, Library of Congress, April 1953, unclass.

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PHASE I BOOK EXPLOITATION

SOV/3200

Danilov, Vasiliy Matveyevich, Semen Yakovlevich Koltunov, and Georgiy Vital'yevich Likhnitskiy

Prakticheskoye rukovodstvo po vodorodnoy naplavke babbita (Manual On Hydrogen Babbitting) Moscow, Mashgiz, 1959. 94 p. 10,000 copies printed.

Reviewer: F.P. Voloshenko, Candidate of Technical Sciences, Docent; Ed.: M.S. Soroka; Chief Ed. (Southern Division, Mashgiz): V.K. Serdyuk, Engineer.

PURPOSE: This manual is intended for technical personnel of machine-building plants and repair shops.

COVERAGE: The manual discusses the lining of metal parts with babbitt and the newly developed method of utilizing a hydrogen flame for this purpose. Chemical composition of babbitt metals having a tin base or lead base is analyzed, specifications for different types of babbitt metals are given, and the operation in which each type of babbitt is employed is indicated. The method of hydrogen babbitting of bearings or other metal parts is discussed

Card 1/3

#### Manual on Hydrogen (Cont.)

SOV/3200

in detail, its advantages and disadvantages pointed out, and the equipment used for this operation described. Major defects of babbitted parts, which may develop during their usage, are analyzed and the procedure of reconditioning these parts is outlined. Designs of various metal parts which can be babbitted by using the hydrogen flame method or some other methods are illustrated and possibilities of applying hydrogen babbitting in repair work or coating, to protect metal parts against corrosion and cavitation, are explored. Safety regulations enforced in Soviet plants for protection of personnel during the babbitting operation are enumerated and described. No personalities are mentioned. There are 6 Soviet references.

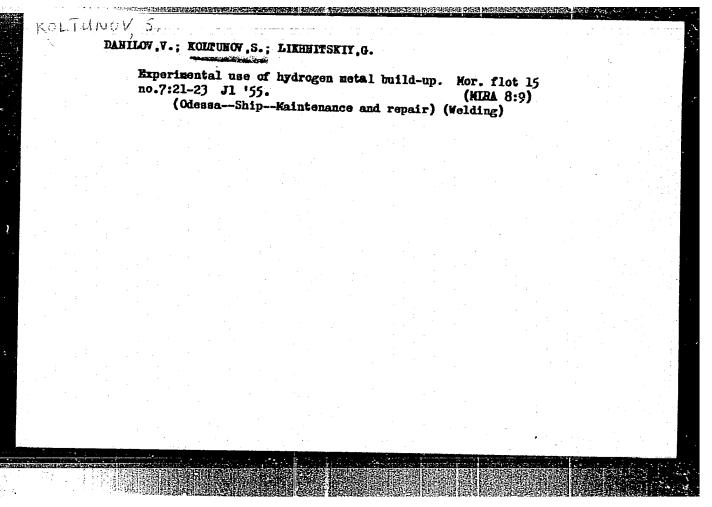
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Babbitting Card 2/3	. · · · · ·				70
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- 2. USSR (600)
- 4. Pipe
- 7. Galvanized zinc plating of pipes. Eng. Mor. flot 13 No. 2, 1953.

Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.



DANILOV, Vasiliy Matveyevich; KOLTUNOV. Semen Yakovlevich; LIKHNITSKIY, Ceorgiy Vital'yevich; VOLOSHENKO, F.P., dotsent, kand.tekhn.nauk, retsenzent; SOROKA, M.S., red.

[Practical guide on babbitt deposition by means of hydrogen welding] Prakticheskoe rukovodstvo po vodorodnoi naplavke babbita. Moskva, Gos.nauchno-tekhn.izd-vo mashinostr.lit-ry. 1959. 94 p. (MIRA 12:10) (Gas welding and cutting) (Babbitt metal)

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KOLTUNOV, V. F. Cand Agr Sci -- (diss) "Means of increasing the yield of plum seedlings in nurseries of the Kuban' ages of Krasnodarskiy Kray."

Krasnodar, 1959, 15 pp (Min of Agr USSR. Kuban' Agr Inst), 150 copies

(KL, 50-59, 128)

-47\_

USSR/Cultivated Plants - Fruits. Berries.

M-6

Abs Jour

: Ref Zhur - Diol., No 20, 1958, 91804

Author

: Koltunov, V.F.

Inst Title

: The Advantage of Cultivated Apple Tree Stocks.

Orig Pub

Sadovodstvo, Vinogradarstvo i vinodeliye Moldavii, 1957,

No 6, 52-53.

Abstract

The experiments made in 1951-1954 at the nursery of the fruit canning trust "Agronom" in Krasnodarskiy Kray showed that in grafting standard apple treevvarieties on the seedlings of wild Caucasian apple trees many plantings (13-40%) are discarded because of blotch disease. In grafting the Borovin, Revel Grushevki, Kuban Anise and Cheliabi varieties on the seedlings the production of the standard two-year olds of some varieties of the apple trees was increased by 1.5 times. Only Borovin and Suyslepskiy varieties showed a better capacity to unite with

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USSR/Cultivated Plants - Fruits. Berries.

M-6

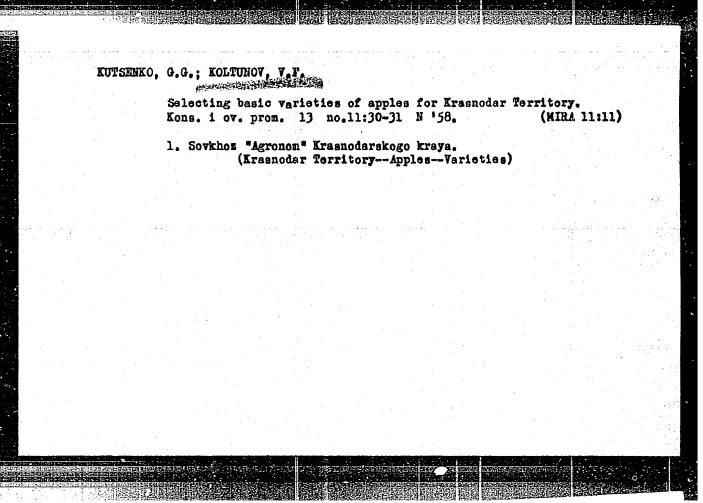
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the Caucasian apple tree. -- I.K. Fortunatov.

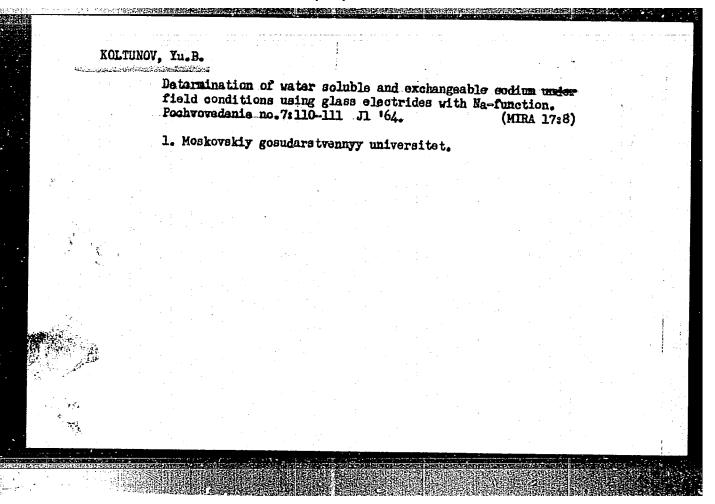
Card 2/2

COUTAIN V. F.



SOURCE CODE: UR/0195/66/007/002/0224/0229 MM/JM/JMD EWT(m)/T 1 26355-66 ACC NR. AP6013380 AUTHOR: Koltunov, V. S.; Marchenko, V. I. ORG: none TITLE: Kinetics of oxidation of hydrazine by nitrous acid SOURCE: Kinetika i kataliz, v. 7, no. 2, 1966, 224-229 TOPIC TAGS: hydrazine, nitrous acid, oxidation kinetics, reaction rate ABSTRACT: The mechanism of the reaction between hydrazine and nitrous acid was studied kinetically in nitric and hydrochloric acid solutions in the 9-40°C range. Analysis of the reaction products led to the following stoichicmetric equation of the re- $7 N_2 H_4 + 12 HNO_2 + H^+ = NH_4^+ + HN_3 + 5 N_2 + 6 N_2 O + 18 H_2 O$ action: In nitric acid, the overall reaction order is two; with respect to each of the reagents, it is one. The reaction rate is given by the equation  $\frac{d(HNO_2)}{d(HNO_2)} = k(HNO_2)(N_2H_2)[H^4].$ the activation energy of the reaction being 8.6 kcal/mol. In hydrochloric acid, the UDC: 547.234 : 542.943+541.127-14

overall reaction	order is two; with respect	to nitrous acid, it i	s one. A possible
mechanism of the	oxidation of hydrazine by	nitrous acid is repres	ented as follows:
	$N_2H_8^+ + NO^+ \rightarrow N_2H_2 + HNC$		
	$2N_1H_1 \rightarrow H_1N-N-N-NH_1 -$		
	$2N_1H_1 \rightarrow HN=N-NH-NH_1$ $2HNO \rightarrow N_1O +$		
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ONISHCHENKO, N.A.; KOLTUNOV, Yu.B.; COLIDZE, V.A.; RASTORGUYEV, B.P.; RAYSKINA, M.Ye.

Measuring and dynamic recording of the activity of Na ions in the myocardium in vivo with the help of selectiv. glass electrodes. Biofizika 10 no.4:645-651 '65. (MIRA 18:8)

1. Institut terapii AMN SSSR, Moskva.

VOSOB'YEV, L.N.; KON TUNOV, Yu.B.; KIRELLA, G.A.; LI SULYUN'

Average activity of potersium salts in the call juice of Nitella muoronata in situ. Biofizika 10 no.3x532-534 165.

1. Biologo-pochvennyy fakulitet Moskovakogo gosudarstvannogo universiteta imeni komonosova. Submitted Aug. 31, 1964.

USSR/Physical Chemistry - Kinetics. Combustion. Explosives. Topochemistry.

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 403

Author: Mirkin, I. A., and Koltunov, V. S.

Institution: Hone Wal State Unio im A. M. Horkey

Title: Kinetics of the Oxidation of Oxalic Acid and of Oxalates by Nitric Acid in Aqueous Solution

Original

Periodical: Zh. fiz. khimii, 1955, Vol 29, No 12, 2163-2172

Abstract: The kinetics of the oxidation of  $(COOH)_2$  (0.2-1 M) by nitric acid (0.1-12.7 M) in aqueous solutions at 970 proceed autocatalytically. The induction period due to the accumulation of  $HNO_2$  depends on the  $HNO_3$  concentration. The rate after the end of the induction period is governed by the equation  $d/H_2C_2O_4//dt = 0.0029/H_2C_2O_4/ \times /HNO_3//(0.7+/H_2)$ . The end products of the oxidation are  $CO_2$  and  $NO_2$  (stoichiometric equation:  $2HNO_3 + 3H_2C_2O_4 \rightarrow 6CO_2 + 2NO_2 + 4H_2O_2$ ). The presence of  $NO_2$ , the concentration of which increases with increasing

Card 1/2

5(1)

AUTHORS:

Timoshev, V. G., Rodionov, A. V., Koltunov, V. S., Chumakov, P. S.

S07/32-25-3-54/62

TITLE:

Laboratory Extractor With Gas Lifter (Laboratornyy ekstraktor

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 3, pp 377-378 (USSR)

ABSTRACT:

The described extractor with gas lifter is practically a set of individual parts in which each of the individual parts has roughly the effect of 0.95 of a theoretical plate. Thus, by changing the number of individual parts, the extractor may be adjusted to whatever efficiency is needed. In the present case a device composed of 48 sections, i.e. corresponding to 45 theoretical plates, was used. The sketch of an individual part of the extractor is given (Fig) by means of which the operation of the device is described. The extractor may be used for the extraction-separation of substances, and for various technical processes based on liquid extraction; There

Card 1/1

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8/195/62/003/006/006/011 E075/E436

//.//60 //./230 AUTHORS:

Koltunov, V.S., Nikol'skiy, V.A., Agureyev, Yu.P.

TITLE !

The kinetics of oxidation of hydrazine with hitric acid in aqueous solution

PERIODICAL: Kinetika i kataliz, v.3, no.6, 1962, 877-881

TEXT: The oxidation of hydrazine was investigated to establish its stechiometry and kinetics. The rate of the reaction was measured by the decreasing concentration of hydrazine. Nitric acid was used in concentrations ranging from 2.2 to 8.2 mole/litre. Analysis of the oxidation products indicated that the reaction is

 $17N_2H_4 + 16HNO_3 = 4NH_4NO_3 + 4HN_3 + 4N_2O + 11N_2 + 32H_2O$ Since  $log [N_2H_4]$  decreases linearly with the time of oxidation, the reaction is of the first order. The reaction is however of the third order in respect of H and NO3 ions and the experimental

data are satisfactorily described by the equation  $\frac{d(N_2H_4)}{dt} = k_2 \left[ N_2H_4 \right] \left[ HNO_3 \right]^2 \gamma_{\pm}^3$ 

Card 1/2

# KOLTUNOV, YA. L.

Pamiatka derovoobdelochnika (obshchie pravila bezopasnoi raboty) Moskva, Goslestekhizdat, 1944. 10 p.

Instructions for woodworkers (general rules for accident prevention).

DLC: Unclass.

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

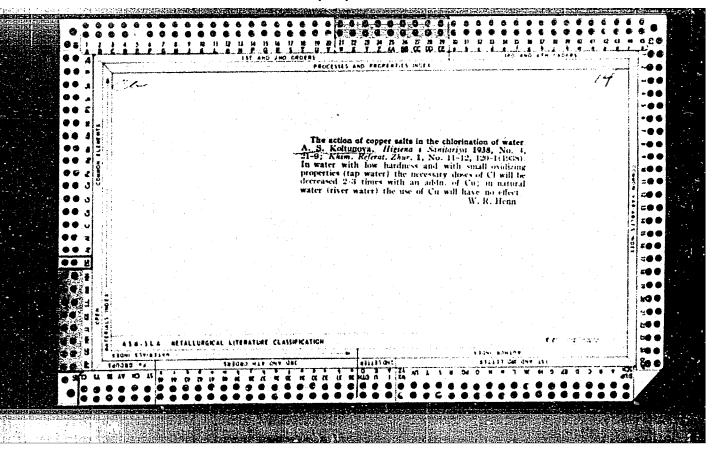
KOLTUNOV, YA. L.

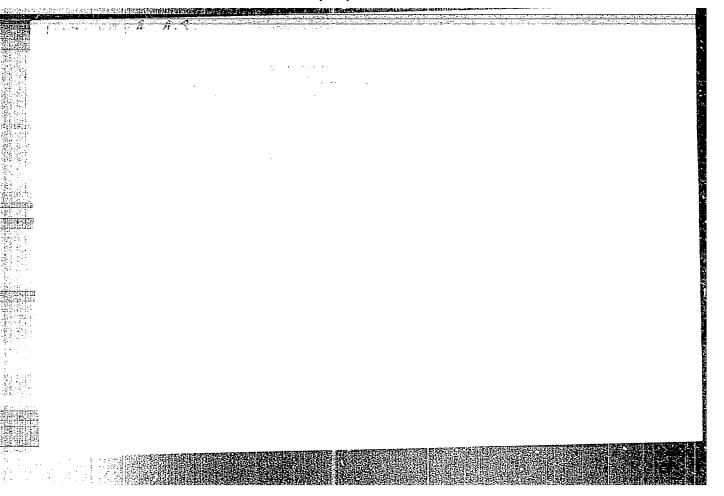
Obshcie osnovy blagoustroistva derevoobrabatyvaiushchikh tsekhov. Moskva, Goslestekh-izdat, 1944. 18 p. illus.

General planning and organization of woodworking establishments.

DLC: TS850.K6

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.





VERTEBNAYA, I.P.; IZ"YUROVA, A.I.; KOLTUNOVA, A.S.; LITVINOV, A.S.; RUFFEL!, M.A.

Sanitary state of bodies of water in the Lenin Volga-Don Navigation Canal system during the first year of its filling. Gig.i san. no.3:9-17 Mr '54. (MLRA 7:2)

Is Institute obshchey i kommunal noy gigiyeny Akademii meditsinskikh nauk SSSR.
 (Volga-Don Canal--Sanitary affairs)

KOLTUNOVA, A.S.

VERTEBRAYA, P.I., starshiy nauchnyy sotrudnik; IZ"YUROVA, A.I., starshiy nauchnyy sotrudnik; KOLYUNOVA, A.S., starshiy nauchnyy sotrudnik; RUFFEL', M.A., starshiy nauchnyy sotrudnik; TIKHVINSKAYA, N.H., starshiy nauchnyy sotrudnik

Role of sanitary preparation of the TSimlyansk reservoir bed on the quality of water. Gig. i san. 22 no.1:72-76 Ja '57. (NLRA 10:2)

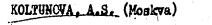
1. Iz Instituta obshchey i kommunal'noy gigiyeny AMN SSSR. (WATER SUPPLY.

hyg. aspects of watershed (Rus))

KOLTUNOVA, A. S., ITSKOVA, A. I., RAPOPORT, K. A., SKVORTSOVA, N. N., DRACHEV, S. M., KONDROR, I. S., SOLTYSSKIY, YE. I.

"Hygienic Standardization of the Content of Mineral Salts in the Drinking Water."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.



Sanitary protection of water supply sources. Fel'd. i akush. 25 no.4:56-59 Ap '60. (MIRA 14:5) (WATER\_SUPPLY ENGINEERING\_HYGIENIC ASPECTS)

DRACHEV, S.M., prof.; VERTEBNAYA, P.I.; IZMYUROVA, A.I.; KABANOV, N.M.; KOLTUNOVA, A.S.; BYLINKINA, A.A.; IZMEROV, N.F., red.; BEL'CHIKOVA, Yu.S., tekhm. red.

[Sanitation problems of the supply and utilization of water in arid districts] Gigienicheskie voprosy khoziaistvenno-pit'evogo vodosnab-zheniia i vodopol'zovaniia v zasushlivykh raionakh. Moskva, Medgiz, 1961. 206 p. (MIRA 14:11)

(Water supply)

ROYKH, I.L.; KOLTUNOVA, L.N.; BELITSKAYA, S.G.; BOLOTICH, I.P.

Investigating the atmospheric corrosion of vacuum condensates of zinc by photographic, optical and weight methods. Fiz. met. i metalloved. 17 no.5:784-786 My '64. (MIRA 17:9)

1. Odesskiy tekhnologicheskiy institut imeni Lomonosova.

ROYKH, I.L.; KOLTUNOVA, L.N.; TOLKACHEV, V.Ye.; KIRICHENKO, V.P.

Atmospheric corrosion of vacuum Mg-Zn condensates of variable composition. Dokl. AN SSSR 159 no.2:413-415 N '64.

(MIRA 17:12)

1. Odesskiy tekhnologicheskiy institut im. M.V. Lomonosova. Predstavleno akademikom S.A. Vekshinskim.

ROYKH, I.L.; BOLOTICH, I.P.; KOLTUNOVA, L.N.

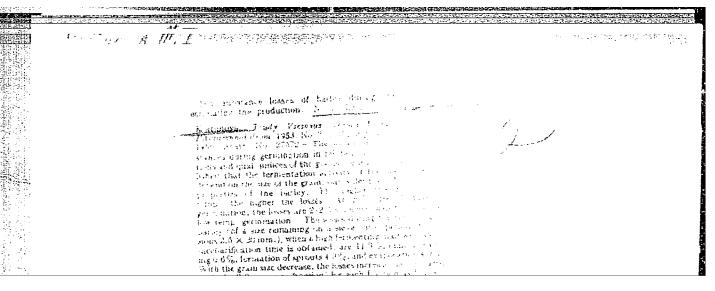
Determination of the activation energy of formation of hydrogen oxide and hydrogen peroxide in the atmospheric corrosion of Mg and Al. Zhur. fiz. khim. 36 no.9:2052-2054 S '62. (MIRA 17:6)

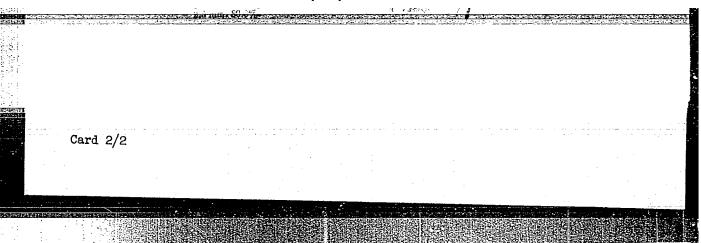
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1. Cdesskiy tekhnologichwakiy institut imoni Lemenoseva.





LEONOVICH, N.V.: KOLTUNOVA, M.I.

Biochemical characteristics of changes in beer caused by pasteurization. Trudy VNIIPP no.7:64-69 159.

(Beer)

KOLTUNOVA, M.P.

LEMTAL', Genrikh Al'bertovich; TARASOV, Aleksandr Pavlovich; YURCHEHKO, I.F., inzhener, redaktor; KOLTUNOVA, M.P., redaktor; KHITROV, P.A., tekhnicheskiy redaktor

[Wages of workers employed on railroad tracks and installations; a reference manual] Oplata truda rabotnikov sluzbby puti i scoruzbenii; spravochnik. Moskva, Gos transp. zhel-dor. izd-vo, 1955. 139 p. (Railroads--Salaries, pensions, etc.) (MIRA 9:3)

GAIKIN, Mikhail Aleksendrovich; NIKITIN, Viktor Alekseyevich; KOLTUNOVA, N.P., red.; BOBROVA, Ye.H., tekhn. red.

> [Business accounting for locomotive repair plants; practices of the V.I. Lenin Locomotive Repair Plant in Rostov] Khoziaistvennyi raschet na parovozorementnom zavoda; iz opyta raboty Rostovskogo parovozorementnogo zavoda im. V.I. Lenina, 1958, 101 p. (MIRA 11:7)

(Bostov-on-Don-Locomotives-Maintenance and repair)

ALEKSANDROV, Aleksandr Petrovich; LAZAREV, Dmitriy Filippovich; OBUKHOV, Vladimir Vladimirovich; KOLTUNOVA, M.P., red.; BOBROVA, Ye.H., tekhn.red.

[Collection of important laws concerning labor protection and safety engineering in transportation construction] Sbornik vashneishikh materialov po okhrane truda i tekhnike besopasnosti na transportnom stroitel'stve. Moskva, Gos. transp. zhel-dor. izd-vo, 1958. 1233 p. (MIRA 12:2)

1. Russia (1923- U.S.S.R.) Laws, statutes, etc. (Railroads--Safety measures) (Railroad law)

BABADZHANOVA, Vera Ivanovna; KAMINSKIY, Yuriy Konstantinovich; KIXSHNIKOV, Feder Leont'yevich; LUTSFNKO, Illarion Grigor'yevich; FILETSKIY, Valerian Aleksandrovich; SOLOVEYCHIK, Mikhail Zakharovich; KOLTUNOVA, N.P., red.

[Passenger's manual] Sprayochnik passashira. Moskva, Transport, 1965. 375 p. (MIRA 18:8)

ANGELEYKO, Viktor Ivanovich; NAUMOV, Georgiy Karpovich; TUCHKEVICH, Tat'yana Maksimovna; KOLTUNOVA, M.P., red.; BOBROVA, Ye.N., tekhn.red.

[Labor planning and organization in track maintenance]
Organizateiia i planirovanie truda v putevom khoziaistve.
Moskva, Gos.transp.zhal-dor.izd-vo, 1959. 147 p. (MIRA 13:1)
(Railroads--Track)

BEREZIN, Boris Pavlovich; KOLTUNOVA, M.P., red.; BOBROVA, Ye.N., tekhn.red.

[Economics and organization of repair shops for track maintenance and construction equipment] Ekonomika i organizatsiis remontnykh predpriistii putevogo khozisistva i stroitelistva. Moskva, Gos.transp.shel-dor.izd-vo, 1959.
241 p. (MIRA 13:11)

(Railroads -- Repair shops)

LIN'KOV, Mikhail Vasil'yevich; KOLTUNOVA, M.P., red.; BOEROVA, Ye.N., tekhn.red.

[Labor planning in a railway district] Planirovanie truda na otdelenii zbeleznoi dorogi. Moskva, Vses.izdatel'sko-poligr. ob'edinenie K-va putei soobshcheniia, 1960. 74 p.

(HIRA 14:1)

(Reilroads--Production standards)

BROK, Aleksandr Arturovich; ZAUSAYLOV, Boris Alekseyevich; STEPANOV, Nikolay Grigor yevich; KOLTUNOVA, M.P., red.; BOBROVA, Ye.M., tekhn.red.

[Fundamentals of safety engineering and fire prevention measures in railroad transportation] Osnovy teknniki bezopasnosti i protivopozharnoi tekhniki na sheleznodorozhnom transporte. Moskva. Vses.izdatel sko-poligr.ob edinenie K-va putei soobshcheniia. 1960. 234 p.

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(Bailroads--Safety measures)
(Bailroads--Fires and fire prevention)

BABELYAN, Valentin Beniaminovich; KOLTUNOVA, M.P., red.; BOBROVA, Ye.N., tekhn.red.

[Economic analysis of the work of railroad construction organizations] Ekonomicheskii analiz deiatel'nosti zheleznodorozhnoi stroitel'noi organizatsii. Izd.3., perer. i dep. Moskva, Vses. izdatel'sko-poligr.ob\*edinenie M-va putei soobshcheniia, 1960.
237 p. (HIRA 13:11)

(Railroads)

DENICHEV. Georgiy Maksimovich, kand.tekhn.nauk; KOLTUHOVA, M.P., red.; KHITROV, P.A., tekhn.red.

[Warehouses and the mechanization of warehouse work] Material'nye sklady i mekhanizatsiia skladskikh rabot. Izd.2., dop. i perer.

Moskva, Vees.imdatel'ako-poligr.ob\*edinenie M-va putei soobshcheniia,
1960. 303 p.

(Railroads--Freight) (Warehouses)